

Title (en)

Method of and apparatus for controlling motion of a machine member.

Title (de)

Verfahren und Einrichtung zur Steuerung der Bewegung eines Maschinenteiles.

Title (fr)

Méthode et dispositif de commande du déplacement d'un élément d'une machine.

Publication

**EP 0470564 B1 19951018 (EN)**

Application

**EP 91113159 A 19910805**

Priority

US 56336690 A 19900806

Abstract (en)

[origin: EP0470564A2] A method and apparatus for machine member motion control are provided which reduce position path errors in sampled data motion control systems. Position commands defining locations of a moveable machine member are periodically produced at a predetermined interval as is conventional in sampled data motion control. Intermediate position commands are produced at a predetermined sub-interval less than the predetermined interval in response to a parametric function relating member position and time, the parametric function being continuous through positions defined by the position commands. The intermediate position coordinates are computed as the sum of products of coefficients and coordinates of selected member position commands. To reduce processing time, the coefficients are computed and stored in advance of execution of motion for recall as motion progresses. Where a parabolic function is used to produce intermediate position commands, the sum of products of coefficients and, respectively, past, present and target coordinates are used to compute intermediate positions between the present and target positions. <IMAGE>

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**G05B 19/4103** (2006.01)

CPC (source: EP US)

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Citation (examination)

- EP 0319587 A1 19890614 - FANUC LTD [JP]
- EP 0406784 A2 19910109 - ADVANCED DATA PROCESSING [IT]
- EP 0394474 A1 19901031 - FANUC LTD [JP]
- EP 0417337 A1 19910320 - SIEMENS AG [DE]

Cited by

US5438522A; WO9725661A1

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**EP 0470564 A2 19920212; EP 0470564 A3 19920506; EP 0470564 B1 19951018**; CA 2048383 A1 19920207; CA 2048383 C 19961126; DE 69113917 D1 19951123; DE 69113917 T2 19960404; JP H0580834 A 19930402; US 5229698 A 19930720

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